

March 1, 2005

SUBJECT:

U. S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

ATTENTION: Document Control Desk

Duke Energy Corporation

Oconee Nuclear Station, Units 1, 2, & 3 Docket Nos. 50-269, 50-270, 50-287 McGuire Nuclear Station, Units 1 & 2

Docket Nos. 50-369, 50-370

Catawba Nuclear Station, Units 1 & 2

Docket Nos. 50-413, 50-414

Response to NRC Generic Letter 2004-02, Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water

Reactors

On September 13, 2004, the NRC issued Generic Letter (GL) 2004-02. The NRC issued the Generic Letter to request licensees to perform an evaluation of the emergency core cooling system and containment spray system recirculation functions in light of the information provided in the GL and, if appropriate, take additional actions to ensure system function.

The Generic Letter requests that licensees submit information regarding planned actions and the schedule for completing the requested evaluation within 90 days of the date of the safety evaluation report providing guidance for performing the requested evaluation. The staff safety evaluation was issued by NRC letter to NEI dated December 6, 2004. More detailed information regarding results of the evaluation and corrective actions is required to be submitted by September 1, 2005.

Pursuant to 10 CFR 50.54(f), Duke's 90-day response to GL 2004-02 is provided in Attachment 1.

This letter contains regulatory commitments, which are provided in Attachment 2. If you have questions or need additional information, please contact Mary Hazeltine at 704-382-5880.

Very truly yours

James R. Morris

Vice President, Nuclear Support

Attachments

JAMES R MORRIS

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I affirm that I, James R. Morris, am the person who subscribed my name to the foregoing, and that all the matters and facts herein are true and correct to the best of my knowledge.

Vice President, Nuclear Support

Subscribed and sworn to me:

March 1, 2005

Date

Notary Public

My Commission Expires:

Date

STORY OF STREET

SEAL

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Attachment 1

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The addressees are requested to provide information regarding their planned actions and schedule to complete the requested evaluation. The information should include the following:

Requested Information (GL Item 1a):

A description of the methodology that is used or will be used to analyze the susceptibility of the ECCS and CSS recirculation functions for your reactor to the adverse effects identified in the generic letter of post-accident debris blockage and operation with debris-laden fluids identified in the Generic Letter. Provide the completion date of the analysis that will be performed.

Oconee, McGuire and Catawba Nuclear Stations intend to fully address all adverse effects relevant to GSI-191 identified in the Generic Letter such as sump screen head loss, structural adequacy, impeded flow paths or "choke points", and "downstream effects."

- Sump screen head loss will be addressed utilizing the methodology developed by NEI and documented in Guidance Report NEI 04-07, as amended by the NRC's Safety Evaluation Report on these guidelines. However, Duke may substitute simplifying assumptions, alternative methodologies or inputs, hardware-specific head loss correlations, and/or plant-specific information as appropriate.
- Structural analysis will follow commonly used analytical techniques and widely accepted engineering practices.
- "Choke points" will be identified as part of our containment walkdowns and review of plant layout documentation. The effects of any such "choke points" will be included in the minimum water level calculations.

This analysis will be completed by September 1, 2005.

Several industry efforts are under way to evaluate coating failures, the effects of chemical reactions in containment during a LOCA and the downstream effects of debris-laden fluid. To the extent that information from these efforts becomes available, Duke will utilize it as part of the analysis. However, if the information from these activities is not available, Duke will address these issues using appropriate assumptions and methodologies.

Requested Information (GL Item 1b):

A statement of whether you plan to perform a containment walkdown surveillance in support of the analysis of the susceptibility of the ECCS and CSS recirculation functions to the adverse effects of debris blockage identified in this generic letter. Provide justification if no containment walkdown surveillance will be performed. If a containment walkdown surveillance will be performed, state the planned methodology to be used and the planned completion date.

Oconee, McGuire and Catawba Nuclear Stations have contracted with ENERCON Services, Inc. to perform a walkdown of each unit. The ENERCON Services, Inc. walkdown methodology was developed using NEI 02-01, "Condition Assessment Guidelines: Debris

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Sources Inside PWR Containments," dated April 19, 2002. The walkdowns have or will be completed as described below:

- Oconee Unit 1, Spring 2005
- Oconee Unit 2, Fall 2005
- Oconee Unit 3, completed Fall 2004
- McGuire Unit 1, Fall 2005
- McGuire Unit 2, Spring 2005
- Catawba Unit 1, Spring 2005
- Catawba Unit 2, completed Fall 2004

Attachment 2

- 1. Duke has committed to address the adverse effects relevant to GSI-191 as addressed in Generic Letter 2004-02 as described in Attachment 1 to this letter by September 1, 2005.
- 2. Duke has either completed or is committed to perform the following containment walkdowns as described in Attachment 1 to this letter:
 - Oconee Unit 1, Spring 2005
 - Oconee Unit 2, Fall 2005
 - Oconee Unit 3, completed Fall 2004
 - McGuire Unit 1, Fall 2005
 - McGuire Unit 2, Spring 2005
 - Catawba Unit 1, Spring 2005
 - Catawba Unit 2, completed Fall 2004